

## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <a href="http://about.jstor.org/participate-jstor/individuals/early-journal-content">http://about.jstor.org/participate-jstor/individuals/early-journal-content</a>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

## THE HITTITE LANGUAGE

## MAURICE BLOOMFIELD

JOHNS HOPKINS UNIVERSITY

In the summer of 1916 there came to the hands of American scholars a report by Professor Friedrich Hrozný, of the University of Vienna, printed in the Mittheilungen der Deutschen Orient-Gesellschaft, Nr. 56 (December, 1915), in which he dealt with the Hittite language. Professor Hrozný was one of a group of Orientalists commissioned by the Berlin Deutsche Orient-Gesellschaft to decifer the Hittite cuneiform documents which had been excavated a number of years before by Professor Hugo Winckler in Boghazköi in Cappadocia, and which were then deposited in the Imperial Ottoman Museum in Constantinople. munication of an historical or filological character could have been more startling; Professor Hrozný claimed that Hittite was Indo-European, and inaugurated his thesis by a sensational exhibit of etymological and grammatical illustrations. One thing was clear without further ado: if his illustrations were based upon sound deciferment of the cuneiform characters; if his translations were impeccable; if the resulting speech units admitted of no other linguistic interpretations than those proposed, and if they did not represent merely a small selection of I. E. assonances, such as any language might furnish: then Hittite must be Indo-European.

Hrozný promised a full treatise, but during the troubled years following not much reached our shores, except reviews of his thesis by various European scholars, the majority of whom accepted his conclusions without any kind of reservations, the a sceptical voice or two could be heard in the midst of the chorus of acclaim. Not until the spring of 1920 were we privileged to see Hrozný's full treatise, entitled 'Die Sprache der Hethiter', published in Leipzig in 1917; and it is this treatise, along with a volume of Hettitic cuneiform texts of Boghazköi, in transcription, translated and commented upon by the same scholar, which furnish the main basis of the present discussion.\footnote{1} In addition,

<sup>&</sup>lt;sup>1</sup> Hethitische Keilschrifttexte aus Boghazköi, in Umschrift mit Übersetzung und Kommentar, von Friedrich Hrozný. i. Lieferung, Leipzig, 1919. Subsequently appeared a treatise by Carl J. S. Marstrander, entitled Caractère

it is quite certain that the Boghazköi inscriptions are closely related to the two Arzawa letters found among the Tel-el-Amarna tablets, containing correspondence between the Pharaoh Amenhotep iii and the Arzawa potentate Tarhundaraba. Just what Arzawa is—Cilicia, Commagene, Cyprus—has remained uncertain. It was near Hatti; its relationship with Hittite cannot be questioned; and Hrozný uses its evidence on a familiar par with Hittite. In fact, Hrozný may be said to start with certain results or assumptions regarding the character of Arzawa which were made by Knudtzon (supplemented by Bugge and Torp) in his monograf on the Arzawa letters in 1902.<sup>2</sup> Thus the forms u-ie-nu-un and up-pa-ah-hu-un are explained by Hrozný (p. 127), after Knudtzon (pp. 54, 55), as preterites first sing. act., both in the sense of. 'I have sent.'

Since the appearance of Hrozný's Language of the Hittites there have been further important developments. First, I may mention an inscription which contains Sanskrit words, especially the odd numerals from one to seven in the forms aika, tiera, panza, and šatta, in close vicinity to the cuneiform signs of these numerals by wedge count.<sup>4</sup> They occur in composition with a word vartana, again obviously Sanskritic, as epithets of horses in a sort of iππική composed by 'Kikkuli<sup>5</sup> from the land Mittani', and lend obvious support to the four much-discussed names of Vedic gods (Mitra, Varuna, Indra, and the Nāsatyas), discovered long ago by Hugo Winckler.<sup>6</sup> Dr. Forrer thinks that these Sanskrit traces are to be assigned to the 'Urinder', whose original home he places on the right bank of the river Kur (Cyrus) up to the Kaspian sea, and that they crossed the Kaukasus into

Indo-Europé n de la Langue Hittite, Christiania, 1919, in which the author with even greater assurance treats the same language as Indo-European. His explanations of the fenomena often differ markedly from Hrozný's. Cf. also Ferdinand Sommer, 'Hethitisches', in Boghazköi-Studien, 4. Heft = iii. Stück, 1. Lieferung (1920), p. 1.

<sup>&</sup>lt;sup>2</sup> Die zwei Arzawa-Briefe, die ältesten Urkunden in indogermanischer Sprache, Leipzig, 1902.

<sup>&</sup>lt;sup>3</sup> Cf. Arzawa-Briefe, pp. 132, 133.

<sup>&</sup>lt;sup>4</sup> See Jensen, Sitzungsber. d. preuss. Akad., 1919, pp. 367 ff.; Ferdinand Sommer, 'Hethitisches', pp. 2ff. (Boghazköi-Studien, 4. Heft = iii. Stück, 1. Lieferung).

<sup>&</sup>lt;sup>5</sup> The name calls up sharply Kilikia.

<sup>&</sup>lt;sup>6</sup> Mittheilungen der Deutschen Orient-gesellschaft, No. 35.

Hittite land at about 2500 B. C.<sup>7</sup> More likely they came to the Hittites from Mittani. It seems quite clear that both the god names and the 'horse numerals', as we may now call them, are not 'Aryan', but Sanskrit; the numeral aika, as compared with aiva, the Achemenidan Persian and Avestan form, as well as the specific Vedic form of the four god names, makes this almost certain.

Simultaneously Forrer, in the paper just quoted, and Hrozný, in an essay published in 1920,8 show that the Boghazköi inscriptions contain many languages in cuneiform script. Forrer counts eight, of which the language hitherto designated flatly as Hittite comprises about nine tenths of the entire material. Forrer finds in addition: Sumerian, Akkadian, 'Urindisch', Harrian, Proto-Hittite, Luvian, and Palāic. Hrozný does not differ much. When the texts say 'he speaks Hittite'9 they mean not the assumed I. E. Hittite, but the autochthonous Proto-Hettitic, described by Forrer, l. c., p. 1033 ff.; this is neither Indo-European, nor Shemitic, nor at the present time correlated with any other group of languages. On the other hand the supposedly I. E. Hittite seems, according to both authors, to be well entitled to the name Kanesian, named after the city of Kaneš. But this latter designation is never indicated by an ethnical adjective as is the case with the other languages (Harlili, Hattili, Lūili, Palā-Instead there occurs, more frequently than the mention of Kaneš, the ethnical designation Nāšili, which Forrer takes to be the same as Kanesian, but Hrozný renders it by 'our' (i. e. 'our language', 'the home language'), from a glibly assumed, and more than dubious stem nas = I. E. nos. Under these circumstances the interrelation, if any, between Kaneš and Nāšili is wholly puzzling, tho it does seem that both refer to the main language whose character we are about to discuss.

The Luvian which seems to have been spoken in the land or the city of Lūjja<sup>10</sup> (MĀT ALULu-u-i-ia) is regarded by Hrozný

<sup>&</sup>lt;sup>7</sup> 'Die acht Sprachen der Boghazköi-Inschriften', von Dr. Emil Forrer, Sitzungsber. d. preuss. Akad., 1918, p. 1036.

<sup>&</sup>lt;sup>8</sup> Über die Völker und Sprachen des alten Chatti-Landes', Boghazköi-Studien, 5. Heft = iii. Stück, 2. Lieferung.

<sup>9</sup> Nu hattili-halzai.

 $<sup>^{10}\,\</sup>mathrm{Hrozn}\circ$  shows some reason for identifying Lūjja with Arzawa; see his paper, pp. 39 ff.

as an even more corrupt I. E. language and dialect than Kanesian. I shall refer to its character below.

Hrozný's work will certainly count among the most memorable events in the history of language and ethnology. The acumen, learning, and infinite diligence displayed by the author is excelled only by the depth of his sincerity and the fervor of his conviction which almost reminds one of the profet. I should say that there is not the least attempt to minimize difficulties, or to bend the object to his purpose. If, nevertheless, his exposition, especially in the matter of etymology, does at times become what we might call teleological, let him who finds himself in the lure of such a theory, yet applies it more objectively, or is more keenly intent upon the all-important truth,—let him throw the first stone.

On the face value of his text-readings, interpretations, and grammatical estimates Hrozný makes out a strong case. are, however, from the start, difficulties and tangles. Cuneiform is, at the best, a poor vehicle for Indo-European. The Kanesian Hittite inscriptions are unilingual, in the main to be explained out of themselves. But a large part of this Hittite is expressed in Sumero-Akkadian ideograms, as well as in syllabic Akkadian words. It may be presumed that such words were pronounced Hittite, in the manner in which words written in a sort of Hebrew were pronounced by their Persian equivalents in Pehlevi. has both its good and its bad side. The good side is, that the lexical meaning of many words is relatively clear from the beginning, which often insures a general conception of what a given passage is about. On the other hand it leaves uncertain the pronunciation of these semi-Akkadian words, for they were pro-The final outcome is this: the Akkadian nounced Hittite. material, by itself fonetically and grammatically indeterminable, really furnishes the start and the concrete basis for Hittite inter-The known meaning of the Akkadian words leads on to the interpretation, and to some extent the text reading of the unknown Hittite words. There is in the volume of texts of 1919 scarcely a sentence that is not part Akkadian. I have, however, the impression that there are few sentences whose sense is perfectly Hrozný himself leaves much untranslated, and resorts to many an interrogation mark. Aside from material imperfections, i. e., fractures, lacunas, and indistinct writing, the subject matter is often turgid, or guess-work. In other words, the filological basis of Hittite is by no means stable; it will require many successive corrections. Under such circumstances even the most conscientious interpreter, who has arrived at a settled theory as to the character of the language, is thereafter sure to be under the influence of that theory. Let us pick at random one or two sentences whose writing is quite clear. P. 168, ll. 16 and 17 of the Hittite texts, we read:

A. BU. IA-ma-kan I. NA. MÂT ALUMi-it-ta-an-ni ku-it an-da a-ša-an-du-li-eš-ki-it na-aš-kan a-ša-an-du-li an-da iš-ta-an-da-a-it. Hrozný translates this: 'When (kuit) my father further in the land Mittani dwelled, he in dwelling therein was hesitating.' The capitals are Akkadian. In the Hittite itself the word ašanduleškit, 'dwelled,' is explained as a preterite from a šk-stem based upon a present participle ašand, extended by a an agent suffix ul, the participle ašand being from the root eš 'to be'. The second occurrence ašanduli is explained as an action noun 'in dwelling' from part of the same materials. That is, going about the other way, the root eš 'to be', which appears here as aš, a by no means agreeable change, 11 makes a participle as and, 'being'; this is extended by a suffix ul which makes out of it an action noun, 'act of being'; and to this is added the present system ending I presume that few students of I. E. speech will think that the term 'monstrous' is too strong for such a bit of formative history. But what is more important is, that everything concerning the word is really guess-work: word-form and meaningand consequent sense of the entire passage. The verb iš-ta-anda-a-it, which reminds Professor Kretschmer of 'stand', is entirely too glib in its pretense.

One's attention is arrested by p. 180, lines 8 and 9:

Nu-za ANŠU-KÚR-RA<sup>pl</sup> ni-ni-in-ku-un nam-ma a-pi-e-da-ni MU-ti I. NA<sup>MÂT</sup> Arzawwa i-ia-an-ni-ia-nu-un-mit

'Now warriors and horses I gathered. Thereupon in this year to the land Arzawa I went'. The two verbs in -un mark high water in the assumed I. E. morfology of Hittite, for -un is supposed to be I. E. -om, first person sing. pret. active, as in Gr. εφερον=Skt. ábharam. But the lexical matter shows just about how Hittite looks: yanniyanun is supposed to be an extension of a verb yannai (i-ia-an-na-i) 'he goes', whereas nininkun 'I gathered', supported elsewhere by forms niniktat and niniktari in the sense of 'it collected itself', or 'it was collected', is interpreted

<sup>&</sup>lt;sup>11</sup> This interchange between e and a is, however, not uncommon.

entirely from the connection. And the particle -mit at the end of yanniyanun and the end of the sentence is also curious.

On the other hand we must not neglect to point out sentences as beguiling as this:

Nu ku-iš A.NA<sup>ilu</sup> ŠAMŠÎ<sup>f</sup> i-da-a-lu-uš tu-uķ-ķa a-pa-a-aš i-da-a-luš e-eš-du ma-a-naš A. NA ŠAMŠÎ<sup>f amêl</sup> KUR tu-uķ-ķa-aš <sup>amêl</sup> KUR e-eš-du: 'Now he who is evil to my sun (i. e. my majesty) he shall be evil to thee. If he shall be an enemy to my majesty, he shall be thy enemy'. In support of this: ma-an šu-me-eš-ma ku-wat-ķa i-da-a-lu i-ia-at-te-ni: 'if moreover ye perform some evil' (Sprache der Hethiter, pp. 110 and 117).

The Boghazki inscriptions, as well as the Arzawa letters, go back to perhaps as early a date as 1500 B. C.; yet, according to any showing, both these Hittite forms are in a state of advanced or secondary development, far exceeding e. g. the Gothic of the fourth century A. D., or the Lithuanian of much later date. The archaic quality, or degree of preservation, of an I. E. language, corresponds in general with its antiquity. Yet here is said to be the oldest dated Indo-European in a condition which, if I guage it aright, might be compared to, but hardly reached by, a modern Italian dialect, remembering that such comparisons can be made only in a very general way. The relation of this Hittite Indo-European to the total of Indo-European is entirely passive or parasitic: it is explained from and as Indo-European, it explains practically nothing Indo-European. I must disarm here the prospective argument that Hittite is profoundly affected by the aboriginal or native non-Indo-European Anatolian with which it blended into the existing product. This may be so, but the secondary character of Hittite morfology is practically all due to form like akkuškinun, manœuvers. Α Indo-European drank', contains the root aku or, elsewhere, eku (Lat. aqua), with the two present affixes sk and nu, and the personal ending m—all Indo-European: root, two present formatives, and personal endings; za-ah-hi-ia-u-wa-aš-ta-ti 'thou shalt fight', p. 182, l. 13 of the texts, is explained from a stem zahhaiš, zahhia, about equal to Skt. sahas, 'strength', Goth. sigis, with three denominative I. E. formatives -y, -w, and -št. Forms like these abound thruout the texts: even the most plastic secondary developments of I. E. speech in other quarters fail to produce types of this sort. Another matter is scarcely less striking, tho perhaps more It concerns the literary and stylistic easily accounted for.

quality of the Hittite, which is of the lowest order. I have recently pointed out12 that Western Asia is at all times, and certainly round about 1500 B. C., practically inarticulate as regards literary contents, expression, and style. There is not in the volume of inscriptions before us a single sentence that rises above banality of contents and crudity of expression and style. This fenomenon is by no means favorable to the I. E. character of the language; it must, if possible, be accounted for by the assumption that the invading Indo-Europeans were, at that early time, so completely absorbed by the Anatolian aborigines as to have given up every trace of their ethnic character. The reverse has happened in India, in Persia, and particularly in Greece, where the invaders found the advanced material civilizations of the Mycenæans and Minoans, who, apparently, were even more inarticulate than the Western Asiatics, but upon whom they impressed their national character so as to result in the final composite of Greek art on the material side, and Greek literature, mythology, and filosofy on the mental side.

Hrozný makes out the feeblest case imaginable on the ground of etymology and fonetics. But if we take his text-readings, interpretations, and grammatical estimates at their face value, his plea for I. E. morfology in Hittite is, on the surface at least, strong enough to captivate, if not to convince.

Let us go in medias res.

There is a non-thematic or *mi*-verb *yami*, which means, rather unexpectedly, 'I make' (not 'I go'). Its conjugation in the present active is as follows:

Singular		Plural
1.	yami	yaweni
2.	yaši, yeši	yatteni
3.	yazi, yazzi, yezzi, yizzi	yanzi, yenzi

This paradigm is certainly impressive, and it has impressed. I would remark that the z of the third person forms is not as simple as it might seem. We instinctively think with the author that it is for t, mouillated by i (cf. Gr.  $\sigma \iota$  for  $\tau \iota$ ). But the participle present in Hittite ends according to the same grammatical theory in za, e. g., adanza, 'eating'13: adanzi, 'they eat'. Now the morfo-

<sup>&</sup>lt;sup>12</sup> Transactions of the American Philological Association, vol. L, p. 76.

<sup>&</sup>lt;sup>13</sup> The type is nominative singular; one would expect adanzaš.

logical connection between these two types in I. E. is everywhere such that the third plural of the present in -nti minus the i is the stem of the participle ( $\phi \epsilon \rho o \nu \tau \iota : \phi \epsilon \rho o \nu \tau - \iota$ ). The explanation of -zi thru palatalization, therefore, leaves za unexplained. encounter the same difficulty several times more: ziq is assumed to be the word for 'thou', where both the z and the i are difficult (comparison with Gr.  $\sigma \dot{v} - \gamma \epsilon$  is a whitened sepulchre). assumed root ad 'eat' shows the forms ezzazi, ezzazzi, 'he eats'; ezzateni 'ye eat'; ezzaten, ezaten, 'eat ye'; and ezzai, 'he eats', flanked by adanzi, 'they eat', and adanza, 'eating'. Disturbingly the same type of participle papranza, 'cooking', occurs also as paprandaza (p. 83), and furthermore the whole class is supposed to have passive, as well as active value. As inspection narrows down to the two elements zi and za, there steals upon me the sense of the presence of two particles, post-positive conglutinates, adverbial, deictic, or localizing, and this impression is not weakened by the apparent existence of an infinitivesupine in -wanzi, -uwanzi, which interchanges with a parallel form without -zi, e. g. šu-ma-aš wa-al-ah-hu-wa-an-zi u-iz-zi 'he comes to annihilate you', and bi-eš-ki-u-wa-an ti-i-ia-u-e-ni 'we come to furnish (cavalry)'; see p. 91. It is barely possible that Hittite interpretation will have to contend sooner or later with a different theory, according to which it is not inflectional at all, in the sense of I. E., or even Shemitic. It may be a language which has no morfology in the sense to which we are accustomed, but rather carries on its correlations by means of deictic, modifying, allusive particles of great mobility and freedom of position. I recommend the inspection of the element za in a variety of other connections, particularly as imbedded in long groups of other particles: ZAG -za, 'to the right side' (which, by the way, varies with ZAG -az); see pp. 4, 11, 13, etc.; nu-za, and nu-za-kan, 'now then'; ma-ah-ha-an-ma-za-kan, 'when further for me'; am-mu-ug-ma-za, am-mu-ug-wa-za, am-mu-uk-ka-za, 'I further', and 'me further'; see za in the Index to the Grammar, particularly pp. 102, 106.

The present indicative of *yami* as given above is not the only type of present inflection in the singular. There is another, about as glaringly different as can be imagined, in which the three singular forms are represented by  $d\bar{a}hhi$ , 'I give', datti or daitti, 'thou givest', and dai, 'he gives'. Many verbs show freely forms of both types. Thus arnumi, 'I bring' makes its second

singular either  $arnu\check{s}i$ , or arnutti; the third person of  $d\bar{a}$  'give' is either  $d\bar{a}i$ , or  $-d\bar{a}izzi$ , and the inflection of  $p\bar{a}$  'give' or 'draw' is in the singular:

- 1. pāimi or pahhi, 'I give',
- 2. pāiši or paitti, 'thou givest',
- 3. paizzi or pāi, 'he gives'.14

The thought comes to the mind of the author, well-versed as he is in I. E. organisms, that the inflection pahhi, paitti, pāi represents the ō-verb, or thematic conjugation. With pahhi he compares I. E. \*bherō ( $\phi \epsilon \rho \omega$ ), but this is hardly more than what the physicians call a placebo. The h of the form is a persistent 'formative' element (p. 177) so that the ending is hi. The form  $d\bar{a}i$  reminds Hrozný of Gr.  $\phi \epsilon \rho \epsilon \iota$ , itself problematic: Scheftelowitz thinks of Aryan e = ai, the middle ending of the first and third singular perfect (p. 2, note 2). No real conviction of either speaker or hearer goes with this. Again, if we confront mi and ti as first and second person suffixes, we can hardly fail to remember the same two suffixes in Arzawa at the end of nouns in the sense of 'mine' and 'thine' (Knudtzon, Zwei Arzawa Briefe, p. 41; Bugge, p. 100; Torp, p. 113). These same suffixes, as well as forms mu, and ta (du), appear also in the Boghazköi documents (p. 120, and p. 128) with the full measure and weight of non-Indo-European conglutinates; explanation of one without the other seems to be illusory. It is as tho in I. E. Greek one could say not only φημί 'I say', but also οἰκο-μι 'my house'.

Perhaps second in importance as regards organic appearance and breadth of scope are the noun-stems in a, i, and u, making nominatives in  $a\check{s}$ ,  $i\check{s}$ , and  $u\check{s}$ . An Indo-Europeanist's mind is sure to respond to the stimulus of u-stems. This category, when oxytone, is the very own of primary adjectival function, describing fysical properties. In Latin adjectives in u have regularly been extended into u-i stems. In order to be on familiar ground I cite first Latin  $su\bar{a}vis$ , brevis, levis, pinguis, mollis, tenuis; in order to show both the extent and primary lexical character of the same type I cite in addition Skt. trsus = Goth. baursus, 'dry'; Skt. prthus = Avestan parabu, Gr.  $\pi\lambda a\tau vs$ , 'broad'; Skt. mrdus = Gr.  $\beta\rho a\delta vs$ , 'slow'; Skt. purus = Gr.  $\pi o\lambda vs$ , 'much'; Skt. asus = Gr. avs vs, 'swift'; Skt. urus = Gr. evs pvs, 'much'; Skt. asus = Gr. evs pvs, 'swift'; Skt. urus = Gr. evs pvs,

<sup>&</sup>lt;sup>14</sup> Note the two somewhat different paradigms given by Sommer, l. c., p. 1.

'broad'; Skt. rjús, 'straight'; rbhús, 'clever'; Greek γλυκύς, 'sweet';  $\beta \alpha \theta \dot{\nu} s$ , 'deep'; Goth. tulgus, 'firm'. In early I. E., u-stems have scarcely a respectable rival in this semantic field. except perhaps the primary adjectives in  $-r\delta$  ( $\tilde{\epsilon}\rho\nu\theta\rho\delta$ - $\varsigma$  =Skt. rudhirás = Lat. ruber, 'red'; Skt. citrá-s = OHG heitar, 'bright'). Of both these types of adjectives, which pervade to this day every nook and corner of I. E. speech, not a single one is to be found in this Hittite of 1500 B. C.; yet their type of inflection is supposed to have remained over. It is as though a Parisian salad had been carried through the house of Hatti, and had left behind nothing but its soupcon of onion aroma. The results of speech mixture are varied and not easy to predict, but it is difficult to conceive processes apparently so concerted and intentional as to wipe out all such words as 'sweet', 'short', 'light', 'thick', 'thin', 'soft', 'broad', 'wide', 'dry', 'swift', etc., etc., of the invading language, yet leave behind the inflection of these words as the orfaned result, so to speak.

Something very like this has happened to the *i*-stems. No Indo-European scholar can visualize *i*-stems without the abstract -ti stems, like Skt:  $gatis = \beta a\sigma is$  = Goth. qum p(i)s; or Skt. mat's, Lat. men(ti)s, Goth. ga-mund(i)s; Skt. sthit's, Gr.  $\sigma \tau a\sigma is$ , Lat. statio. They still control I. E. abstract expression everywhere, as in English station, convention, mention. There is not, as a matter of fact, among the u- and i-stems a single etymology which can claim standing; this as part expression of the wider fact that Hittite I. E. etymology rests on a basis whose shakiness cannot easily be overstated.

We come to the a-stems, nominative aš, accusative an. Echoes sound from many quarters of Western Asiatic speech. Kossaean suryaš; Chaldic (Vannic) -š(e) (with accusative  $ni)^{15}$ ; Mittani quasi-nominatives and accusatives in š and  $n^{16}$ ; even Lycian figures in a way<sup>17</sup>. This declension, the well-known second declension of Greek and Latin grammar, holds in Hittite for both masc. and fem.; thus: annaš 'mother'; ŠAL-naš 'woman'; GIM-aš 'slave-girl'. Again there is not a single even remotely respectable I. E. etymology for this most pervasive class, involving

<sup>15</sup> Hrozný, p. 27, note.

<sup>&</sup>lt;sup>16</sup> Bork, *Die Mitannisprache*, p. 46; see especially the proper names in aš on p. 88 of the text.

<sup>17</sup> Hrozný, p. 49.

either a noun or an adjective. The paradigms of a-stems, on pp. 44, 45, look very good on paper; still, nominative and genitive singular, as well as genitive and dative plural end alike in as; the loc. sing. in az is entirely unexplained; the acc. plur. ends in Outside the paradigm there is considerable mixture between  $\dot{a}\dot{s}$  and  $\dot{i}\dot{s}$ ; the number 'one' in nom. sing. masc. appears as 1- $a\dot{s}$ or 1-iš (Hrozný 92), and see in general pp. 16, 24, 29, 36, 38. The like of this is not unknown elsewhere. There is also mixture between as and us; see p. 30. Still there seems no reason to question that  $u\check{s}$ ,  $i\check{s}$ , and  $a\check{s}$  figure in subject words very regularly; all three occur together in the sentence, p. 166, line 10 of the text volume: memir A. BU. ŠU-wanaš kuiš LUGAL MATHatti ešta nuwaraš UR. SAG-iš LUGAL-uš ešta, 'They said, "His father, who was for us king of the land Hatti, now he was a brave king."' Morfologically this pervades the language as, perhaps, its strongest plea for I. E. character. Still there are notable cross circumstances: all these stems show also a nominative in ša: Telibinuša 'name of a Hittite god' (p. 3); by the side of IR-aš and IR-iš 'slave', also IR-ša (p. 30); Mariaša 'name of a person' (p. 36); apāša, 'this one' (texts, p. 100, l. 15); EN-urtaša, 'name of a person', (texts, p. 136, l. 8); and in Arzawa first letter, l. 23 halugalataša, 'messenger'. There is, moreover, an independent post-positive pronoun nominative as, accusative an, which differs in no wise from the nom. and acc. case-endings -as and -an: this may be added to an existing inflected expression, as in the expression kuiš-aš imma kuiš 'whoever', accusative kuinan imma kuin; tu-uk-ka-aš 'he to you' (p. 110). Out of this perplexity seems to arise the question whether all these, aš, iš, uš, are not, once more, post-positive deictic particles. With every inclination to follow Hrozný's methodic and brilliant exposition, it seems difficult that the material body of all I. E. u-, i-, and a-stems should have disappeared while leaving behind their ghostly endings; better the opposite alternative, that a variety of cuneiform syllables containing s preceded by different vowels chance to lend themselves. in a surprising manner to be sure, to correlation with the endings of these stems current in I. E.

Still, a theory as to linguistic appurtenance derives its strength from cumulation. Hittite exercises its most bewitching enchantment in the domain of pronouns. I have always held that the best test for admission to I. E. membership is thru numerals, pronouns, and nouns of relationship. A puckish prank (as in

Kretan) makes Hittite write its numerals by wedge count; the nouns of relationship are either nursery words, or in Akkadian writing. Not so the pronouns. They appear in syllabic Hittite writing. Thus the personal pronouns, reduced to their lowest terms, present themselves in the following rhythmic shape:

	I	Thou
Nom.	ug, uga, ugga	zig, ziga, zigga, ziķķa tuêl
Gen. Dat. Acc.	ammêl ammug, ammuga,	tug, tuga, tugga, tukka, dukka
	ammugga, ammuķķa	

	We	Ye
Nom.	$anz\hat{a}\check{s}$	šumêš, šumâš
Gen.	$anz \hat{e}l$	šumêl, šumênzân
Dat. Acc.	$anz \hat{a} \check{s}$	šumâš, šummêš, šumêš

After recovering from the general effect of this list, there are a few interesting circumscriptions. ug, etc., is, of course, assumed to be ego, whereas zig, etc., are compared with σύγε. But it is unlikely that the g of one form is not the g of the other, and zi is not  $\sigma \dot{\nu}$  nor, as far as can be seen, anything else Indo-The forms ammug, etc., are both nom. and acc.; they are compared with Gr. ἐμοίγε, but it seems far more natural again to identify the final syllable with the fundamental Therefore, the same seems true of the sound ug in tug, etc. The 've'-stem šuma is not so easily correlated with I. E. yusme as the author thinks; and its genitive šu-me-en-z-an, by the side of which exists a-pi-en-za-an 'eorum', and also an independent šu-raš en-z-an 'your', is perplexing (pp. 115, 116). Doubtless some of these difficulties can be ironed out by assuming sundry processes of analogy which will present themselves in different ways to different experts.<sup>18</sup> Perhaps more important is the almost impalpable air of Indo-Europeanism which pervades this sfere of expression, and I personally have felt at times in the mood to capitulate right here.

The question reaches its climax in the relative, interrogative, and indefinite pronoun  $kui\check{s}$ , neuter kuit, genitive singular  $ku\hat{e}l$ ; nominative plural  $ku\hat{e}\check{s}$ . The indefinite is expressed also by duplication,  $kui\check{s}$   $kui\check{s}$ , neuter kuit kuit; or by  $kui\check{s}$  ki, neuter

<sup>18</sup> Cf. Marstrander, pp. 7 ff.

Comparisons are unnecessary. There are here also difficulties in detail, but they may be surmounted in future. seems well-nigh unimaginable that this part of Hrozný's theory does not hit the nail on the head. Yet with it goes a remarkable corollary which is almost in the nature of a paradox. All students of Lycian seem now agreed that its stem ti is the relative stem = I. E. qi (Latin qui-), and that the combination ti-ke is the indefinite; e. g. in the epitaf, ti ñte hri alahadi tike, ñte ti hrppitadi tike, 'qui intus violat (?) aliquem, vel intus superimponit aliquem'.19 Lydian also has the words his, hid, which Littmann identifies with Lat. quis, quid; see his Lydian inscriptions. Danielsson, 'Zu den Lydischen Inschriften', p. 41, points out also Lyd. k as the enclitic copulative (Lat. que). Hrozný, pp. 191 ff. has an appendix of considerable length which deals with correspondences between Hittite and Lydian. A door must be either open or shut: if these comparisons are correct both Lycian and Lydian, as well as Hittite, are Indo-European, and that, too, of a degree of depravation, unparalleled in any pidgin-dialect.

A word as to the 'Luvian'. Forrer, l. c., p. 1034, quotes from unstated sources a number of Luvian grammatical and lexical forms, some of which have I. E. coloring, others being decidedly strange. Thus he quotes as forms of 'a pronoun', kui, kuiha, kuiš, kuišha, kuištar, and kuinza. He notes a number of reduplicated verbs which look Indo-European: tatarhandu, tatarijamman, tatarrijamna, mimentōwā, hōhoijanda (by the side of hōijadda), and, with 'Attic reduplication', elelhāndu (by the side of ēlhādu). The endings of the verb are du, andu, indu, reminding Forrer of the Lydian -d and ēnt. For the substantive he quotes -anza, and -inzi in the plural; they may bear upon our discussion of -zi and -za, above, p. 201 f.

Hrozný, in his above mentioned essay on the peoples and languages of the Chatti land, pp. 35 ff., 20 quotes one or two Luvian passages and discusses some words. The passages, evidently obscure in meaning, are not translated, but they show some words which resemble Kanesian Hittite. Thus kuinzi, 'which,' with plural meaning and ending -nzi (see Forrer's statement,

 $<sup>^{19}\,\</sup>mathrm{See}$  Vilh. Thomsen, Études Lyciennes, p. 9. Hrozný, p. 49, remarks that the Lycian a-stems correspond to a remarkable degree with the Hittite a-stems.

<sup>&</sup>lt;sup>20</sup> See p. 36, lines 22 ff., 30 ff., and p. 37, lines 36 ff. of the cuneiform texts.

just quoted); azzaštan, 'eat ye', which reminds Hrozný of Kanesian azzašteni, and ezzašten, in the same sense; vaššantari, Kanesian veššanta, 'they clothe themselves'. Hrozný thinks that Luvian is a dialect of Kanesian, or a language closely related, in which I. E. structure is practically effaced. The problem is very obscure, but it would seem rather to point the other way, namely, that Luvian is not I. E., and that many of the alleged I. E. fenomena of Kanesian are only seemingly so, for the very reason that they reappear in non-I. E. Luvian. The future will decide.

As far as I can see the I. E. aspects of Hittite have no basis in any known historic colonizations by Indo-Europeans of parts of Asia Minor. The Phrygian from Thrace and the Armenian of unknown provenience settled in Anatolia at a later time. 900 B. C., Vannic or Chaldic (cuneiform) was still spoken in Urartu, the land later settled by the Armenians. The older Phrygian inscriptions are not earlier than 500 B. C. The Tocharians, Italo-Celtic emigrants, seem to have passed thru Asia Minor on their way to their permanent home in far-away Chinese Turkestan, but we have no record of Tocharian that is not about 2000 years younger than the Hittite age. An I. E. migration from the south-west of Europe must have settled in various parts of Asia Minor many centuries prior to 1500 B. C., and prior to the recorded history of Indo-Europeans in Celtic, Italic, or Hellenic lands. For it must have taken hundreds of years of mixture with the Anatolian aborigines before such languages as Hittite, or Lycian and Lydian (if these two are also I. E.), could evolve out of such a symbiosis. And, be it understood, this Indo-European must then be assumed to be about 3000 years younger in quality than the faint traces of I. E. Aryan which are found in the scant Urindisch of the 'horse numerals' and the four Vedic gods.

My readers will ask point-blank: 'Is Hittite Indo-European?' I answer that it seems to contain an injection of I. E. material in a composite pidgin-Kanesian, but even of this I do not feel quite certain. When Tocharian came to light, the numerals alone settled its status: Hittite has no numerals. They should sound from 2–5: du-uwa, tre-i-eš, ke-tu-wa-reš, pe-en-ku-we or pi-in-ku-we. When Tocharian came to light the nouns of relationship settled its status: pācar 'father'; mācar, 'mother'; prācar, 'brother'. The Hittite words for father and mother are either Anatolian

nursery words: addaš or attaš, 'father', annaš 'mother', or they are written in Babylonian (Shemitic) A. BU 'father'; AHI-IA 'of my brother'; AHÂTU, 'sister'. The Hittite before us has, with the exception of the noun  $w\bar{a}dar$ , said to mean 'water', which is also written widār: genitive wedenaš, u-e-te-na-aš, widêni, hardly a single noun of I. E. etymology. The inflection of the noun is by no means conclusively Indo-European. inflections are at points (not all of them brought out here) bewitchingly Indo-European; at other points they are not less bewilderingly mystifying. From the point of view of verb etvmology there are not a dozen verbs that are securely Indo-European, and the total of etymology, with the exception of pronominal etymology—and here again really only the interrogativeindefinite pronoun—is the weakest link in the chain. ing of conglutinative particles (e. g., ma-ah-ha-an-ma-za-kan 'when further mine', p. 39), combined with the conglutinative use of personal pronouns at the end of nouns, is non-Indo-European, and deserves special investigation. Finally, the over-ripe condition of language at the earliest dating known to I. E. speech history (1500 B. C.) bids us hold still a while longer, on the offchance that we are facing a perplexing illusion.